

Consensus Sequence

Symbol comparison table: blosum62.cmp CompCheck: 6430

Name: <u>hTRADEalpha_1</u>	Len: 423	Check: 4050	Weight: 1.00
Name: <u>hTRAIN_1</u>	Len: 423	Check: 4128	Weight: 1.00
Name: <u>hTRADEbeta_1</u>	Len: 423	Check: 7937	Weight: 1.00
Name: <u>hApo420pep</u>	Len: 423	Check: 8173	Weight: 1.00

//	1				50
<u>hTRADEalpha_1</u>	MALKVLLLEQE	KTFFTLVL	GYLSCKVTCE	SGDCRQQEFR	DRSGNCVPCN
<u>hTRAIN_1</u>	MALKVLLLEQE	KTFFTLVL	GYLSCKVTCE	SGDCRQQEFR	DRSGNCVPCN
<u>hTRADEbeta_1</u>	MALKVLLLEQE	KTFFTLVL	GYLSCKVTCE	TGDCRQQEFR	DRSGNCVPCN
<u>hApo420pep</u>	MALKVLLLEQE	KTFFTLVL	GYLSCKVTCE	SGDCRQQEFR	DRSGNCVPCN
Consensus	MALKVLLLEQE	KTFFTLVL	GYLSCKVTCE	SGDCRQQEFR	DRSGNCVPCN

	51				100
<u>hTRADEalpha_1</u>	QCQPGMELSK	ECGFQYGEDA	QCVTCRLHFR	KEDWGFQKCK	PCLDCAVVNR
<u>hTRAIN_1</u>	QCQPGMELSK	ECGFQYGEDA	QCVTCRLHFR	KEDWGFQKCK	PCLDCAVVNR
<u>hTRADEbeta_1</u>	QCQPGMELSK	ECGFQYGEDA	QCVTCRLHFR	KEDWGFQKCK	PCLDCAVVNR
<u>hApo420pep</u>	QCQPGMELSK	ECGFQYGEDA	QCVTCRLHFR	KEDWGFQKCK	PCLDCAVVNR
Consensus	QCQPGMELSK	ECGFQYGEDA	QCVTCRLHFR	KEDWGFQKCK	PCLDCAVVNR

	101				150
<u>hTRADEalpha_1</u>	FQKANCATS	DAICQDCLPG	FYRKTCLVGF	QDMECVPCGD	PPPPYEPHCA
<u>hTRAIN_1</u>	FQKANCATS	DAICQDCLPG	FYRKTCLVGF	QDMECVPCGD	PPPPYEPHCA
<u>hTRADEbeta_1</u>	FQKANCATS	DAICQDCLPG	FYRKTCLVGF	QDMECVPCGD	PPPPYEPHCA
<u>hApo420pep</u>	FQKANCATS	DAICQDCLPG	FYRKTCLVGF	QDMECVPCGD	PPPPYEPHCA
Consensus	FQKANCATS	DAICQDCLPG	FYRKTCLVGF	QDMECVPCGD	PPPPYEPHCA

	151				200
<u>hTRADEalpha_1</u>	SKVNLVKIAS	TASSPRDTAL	AAVICSALAT	VLLALLILCV	IYCKRQFMCK
<u>hTRAIN_1</u>	SKVNLVKIAS	TASSPRDTAL	AAVICSALAT	VLLALLILCV	IYCKRQFMCK
<u>hTRADEbeta_1</u>	SKVNLVKIAS	TASSPRDTAL	AAVICSALAT	VLLALLILCV	IYCKRQFMCK
<u>hApo420pep</u>	SKVNLVKIAS	TASSPRDTAL	AAVICSALAT	VLLALLILCV	IYCKRQFMCK
Consensus	SKVNLVKIAS	TASSPRDTAL	AAVICSALAT	VLLALLILCV	IYCKRQFMCK

	201				250
<u>hTRADEalpha_1</u>	KPSWSLRSQD	IQYNQSELSC	FDRPQLHEYA	HRACCQCRD	SVQTCQPVRL
<u>hTRAIN_1</u>	KPSWSLRSQD	IQYNQSELSC	FDRPQLHEYA	HRACCQCRD	SVQTCQPVRL
<u>hTRADEbeta_1</u>	KPSWSLRSQD	IQYNQSELSC	LDRPQLHEYA	HRACCQCRD	SVQTCQPVRL
<u>hApo420pep</u>	KPSWSLRSQD	IQYNQSELSC	FDRPQLHEYA	HRACCQCRD	SVQTCQPVRL
Consensus	KPSWSLRSQD	IQYNQSELSC	FDRPQLHEYA	HRACCQCRD	SVQTCQPVRL

	251				300
<u>hTRADEalpha_1</u>	LPSMCCEEAC	SPNPATLQCG	VHSAASLQAR	NAGPAGEMVP	TFFGSLTQSI
<u>hTRAIN_1</u>	LPSMCCEEAC	SPNPATLQCG	VHSAASLQAR	NAGPAGEMVP	TFFGSLTQSI
<u>hTRADEbeta_1</u>	LPSMCCEEAC	SPNPATLQCG	VHSAASLQAR	NAGPAGEMVP	TFFGSLTQSI
<u>hApo420pep</u>	LPSMCCEEAC	SPNPATLQCG	VHSAASLQAR	NAGPAGEMVP	TFFGSLTQSI
Consensus	LPSMCCEEAC	SPNPATLQCG	VHSAASLQAR	NAGPAGEMVP	TFFGSLTQSI

Figure 1

	301				350
hTRADEalpha_	CGEFSDAWPL	MQNPMGGDNI	SFCDSYPELT	GEDIHSLNPE	LESSTSLDSN
hTRAIN_1	CGEFSDAWPL	MQNPMGGDNI	SFCDSYPELT	GEDIHSLNPE	LESSTSLDSN
hTRADEbeta_1	CGEFSDAWPL	MQNPMGGDNI	SFCDSYPELA	GEDIHSLAPE	LESSTSLDSN
hApo420pep	CGEFSDAWPL	MQNPMGGDNI	SFCDSYPELT	GEDIHSLNPE	LESSTSLDSN
Consensus	CGEFSDAWPL	MQNPMGGDNI	SFCDSYPELT	GEDIHSLNPE	LESSTSLDSN

	351				400
hTRADEalpha_	SSQDLVGGAV	PVQSHSENFT	AATDLSRYNN	TLVESASTQD	ALTMRSQLDQ
hTRAIN_1	SSQDLVGGAV	PVQSHSENFT	AATDLSRYNN	TLVESASTQD	ALTMRSQLDQ
hTRADEbeta_1	SSQDLVGGAV	PVQSHSENFT	AATDLSRYNN	TLVESASTQD	ALTMRSQLDQ
hApo420pep	SSQDLVGGAV	PVQSHSENFT	AATDLSRYNN	TLVESASTQD	ALTMRSQLDQ
Consensus	SSQDLVGGAV	PVQSHSENFT	AATDLSRYNN	TLVESASTQD	ALTMRSQLDQ

	401		423
hTRADEalpha_	ESQAIHPAT	QTSLQEA---	---
hTRAIN_1	ESQAVIHPAT	QTSLQEA---	---
hTRADEbeta_1	ESQAIHPAT	QTSLQVRQRL	QSL
hApo420pep	ESQAVIHPAT	QTSLQVRQRL	QSL
Consensus	ESQA-IHPAT	QTSLQ--QRL	QSL

Figure 1

03/05/2016 10:20:04

bioRxiv preprint doi: <https://doi.org/10.1101/000000>; this version posted January 1, 2014. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

TRADE- α
TRADE- β

ESGAIHPATQTSLQEA
ESGAIHPATQTSLQVRQLGSL
401 416 423

Figure 2

CRD1

NGFRp75
OX40
CD40
TRADE

CPTGLYT.H	SGHC..CKAC	MLGEGVAQPC	..G.ANQTVC
CGDTYP..S	NDRG..CHNC	RPCHGAVSNC	..SRSQNTVCR
CREKQYL.I	NSCC..CSIC	QPGQKLVSIC	..TEPTETEC
CRQQEPRDR	SGNVLONC	GPGKELSTIC	GFGYGEDACV

CRD2

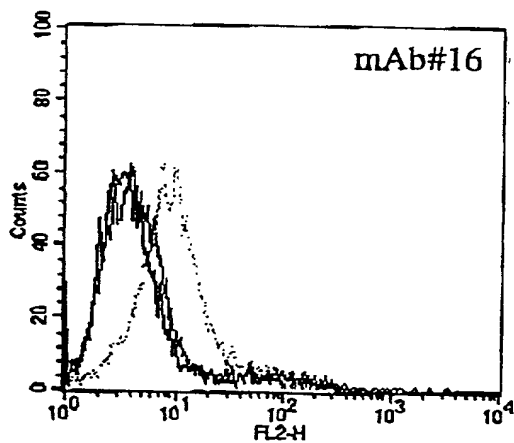
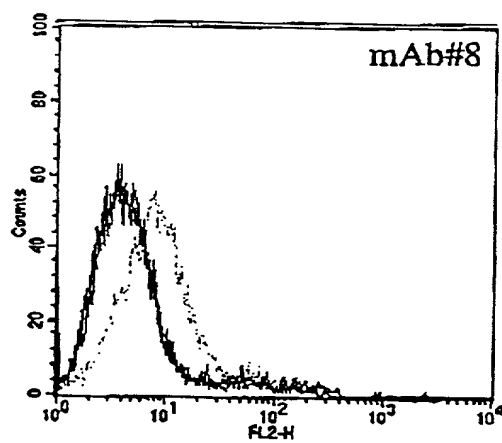
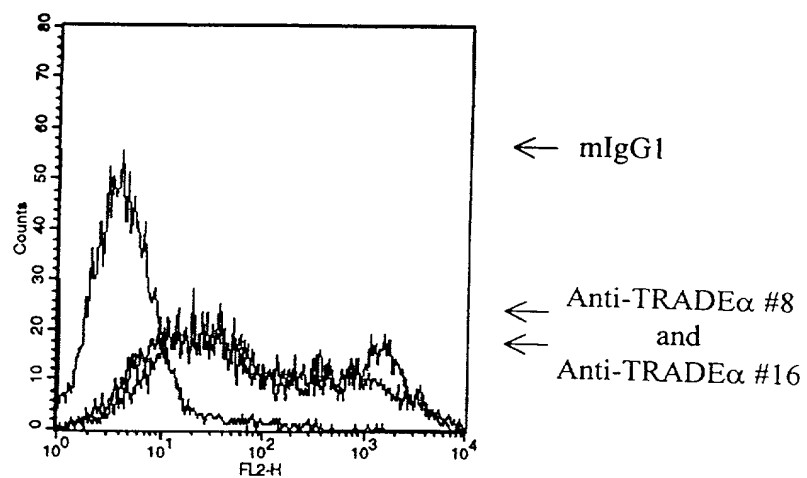
NGFRp75
OX40
CD40
TRADE

FOLDSVTFS	DVVSATEPK	PCTECVGLQS	MSAP...CVE	ADDAVC
PC..GPGFY	NDVVSSTPK	PCFWC.NLRS	GSEKQLCTA	TQDTVC
PCGES.EFL	DTWRETECH	QHKYODPNLG	LRVQQRGTS	T.DTIC
TORLHR.FK	KDWGFQK.CK	FOLDCAVNH.	.RFQKANGSA	TSDATC

Figure 3

			CRD1
ID NO:2 Human	TRADEα		NAIKVILEQEKTEFTLLVLI GYLSKETTESADGRQOETFRREBUA W P N
ID NO:6 Mouse	Trade		NAIKVILPLHRTVLGAAILFLLHIAKVSCTEHEKROQELKREKRIKRLK
			CRD2
ID NO:2 Human	TRADEα		QCGPGMELSKKECHFGYGEDAQCVTORLHRFKKEENCEFKCKKDCILDVAVHIF
ID NO:6 Mouse	Trade		FRIDENELSKKECGFYGEDAQCVTORLHRFKKEENCEFKCKKDCILDVAVHIF
ID NO:2 Human	TRADEα		FOKANGSAITSDAFTGGDCLFGFYRFTKINVOFGMECVPCGDFFPPYEPHCA
ID NO:6 Mouse	Trade		FOKANGSHITSDAVTGGDCLFGFYRFTKINVOFGMECVPCGDFFPPYEPHCT
			TM
ID NO:2 Human	TRADEα		SKVNLVKIAETASSPRDTAAAVTCSALATVILLALLTLQVITYCKRQFMEE
ID NO:6 Mouse	Trade		SKVNLVKISETVSEPPDTAAAVTCSALATVILLALLTLQVITYCKRQFMEE
ID NO:2 Human	TRADEα		KPEWSTLRSDTYGHCSELSCTREQLHEYAHRACQCRKDESVQTCGFVRL
ID NO:6 Mouse	Trade		KPEWSTLRSDTYGHCSELSCTREQLRHCALHRAKRYHRIKSAFMYLHVHL
ID NO:2 Human	TRADEα		LPDMTCERACEPNPFTLGGGVHAAASLGARNAGPACEMVPTFFGSLTQST
ID NO:6 Mouse	Trade		LPDLNMMARARSAREVLAALREPTTLEKMPASVDTMFAFLVSRSL
ID NO:2 Human	TRADEα		GEESIAAMIMONIMCCENISFTGYPTLTGNTIHSINPLESSTSLSEN
ID NO:6 Mouse	Trade		GEESIAAMIMONIMCCENISFTGYPTLTGNTIHSINPLESSTSLSEN
ID NO:2 Human	TRADEα		SSGIVVSGAVPVQEHSENFTAAATDLSTRYNNILVESASTQALTMREGLDQ
ID NO:6 Mouse	Trade		GGGIAAFAALESIGNVSESTDSPRHGDGTIVWEOTLADQORTPAGGW
ID NO:2 Human	TRADEα		ESGAVIHPATQTSLEE 417
ID NO:6 Mouse	Trade		EDRENINLMPAFDA 416

Figure 4



- mIgG1
- antibody
- antibody
+TRADE

Figure 5

09780537 020304
T05020 25508/60

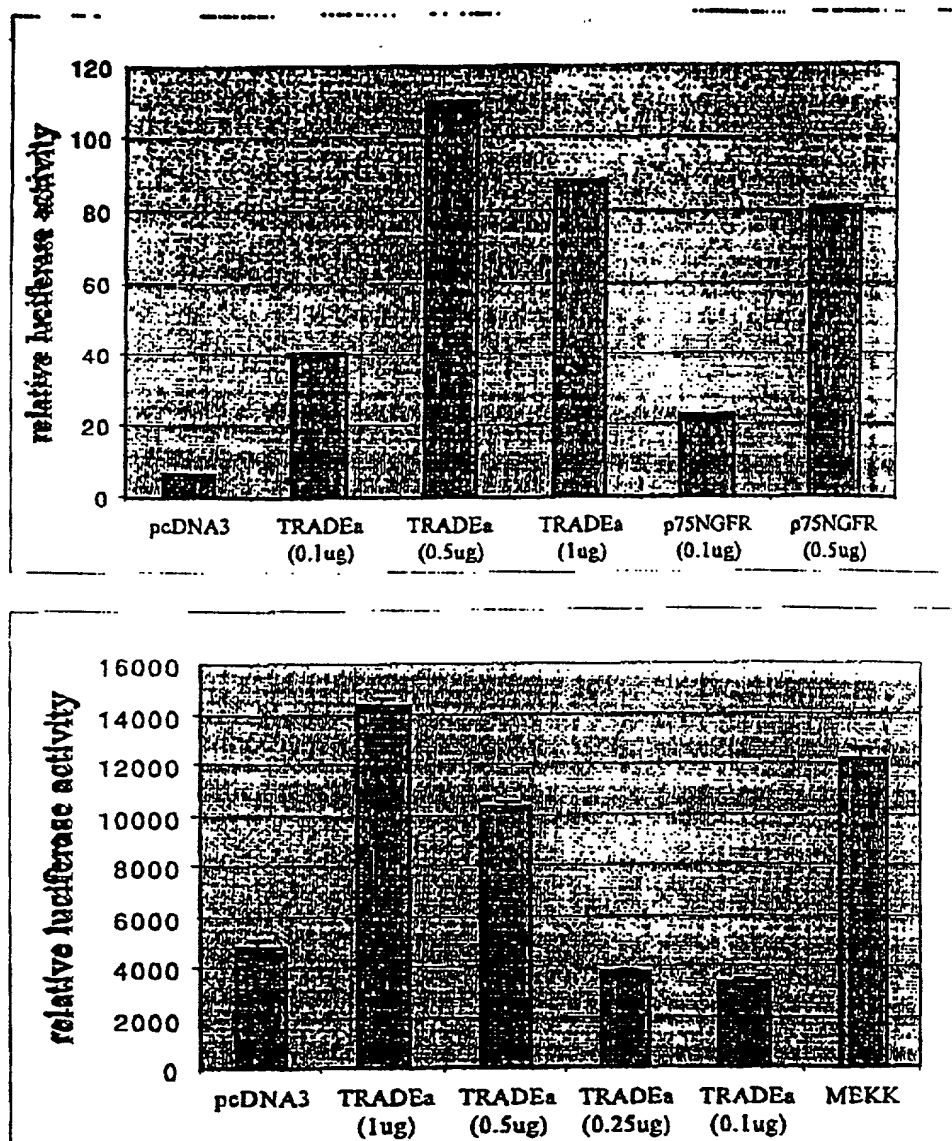


Figure 6

09780532 020901

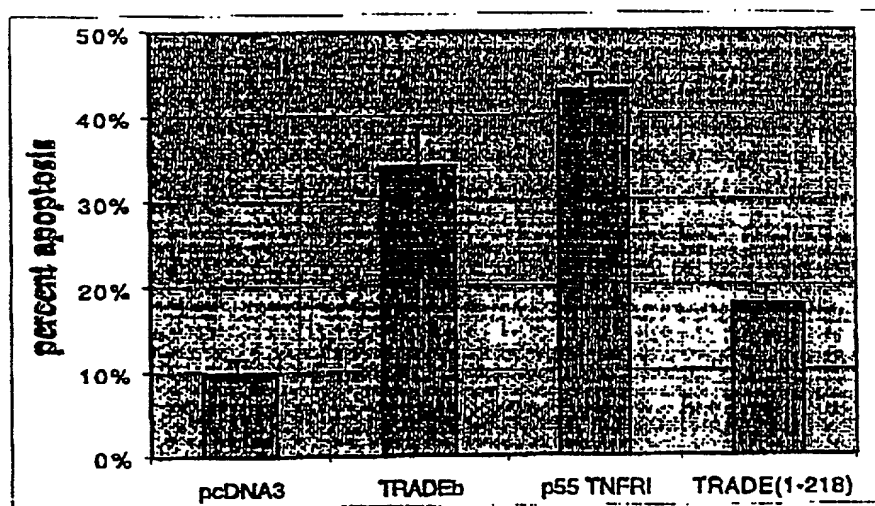
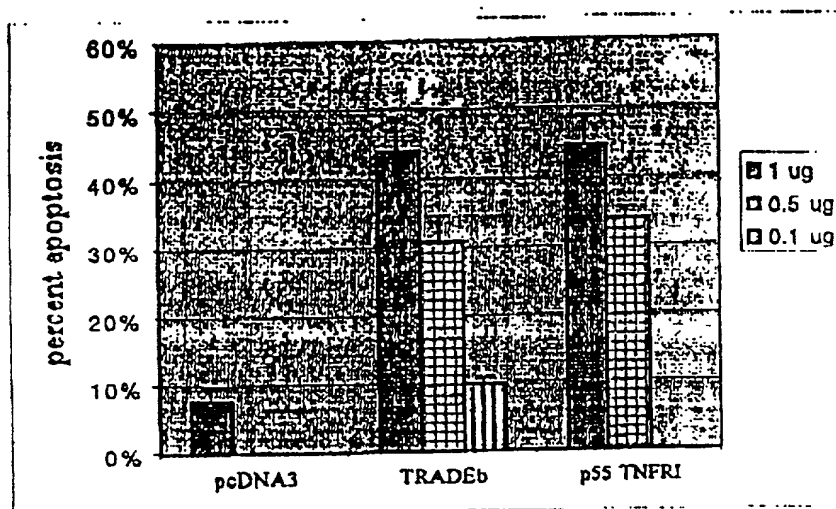
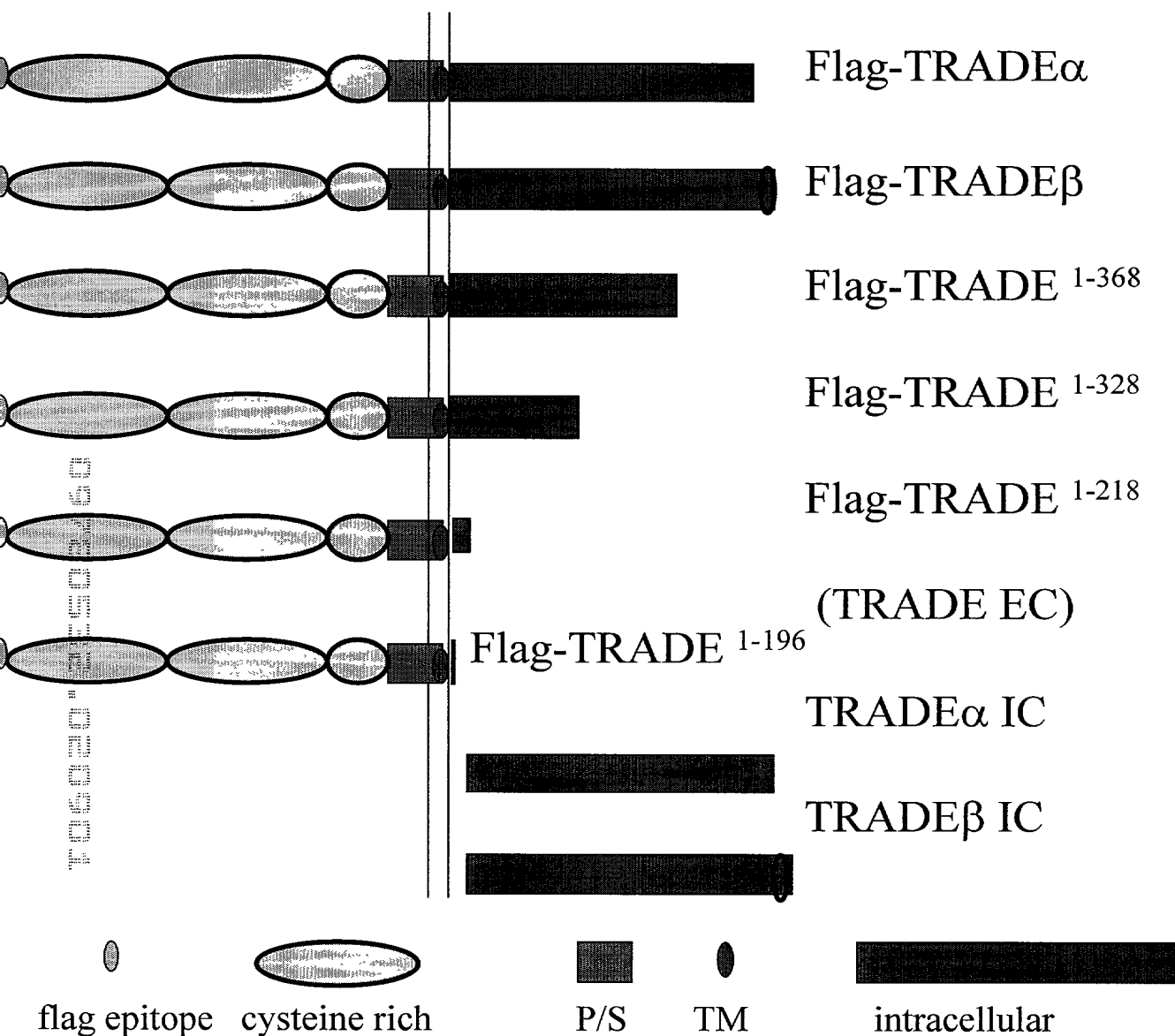


Figure 7

105020 21505/50



Figure 8

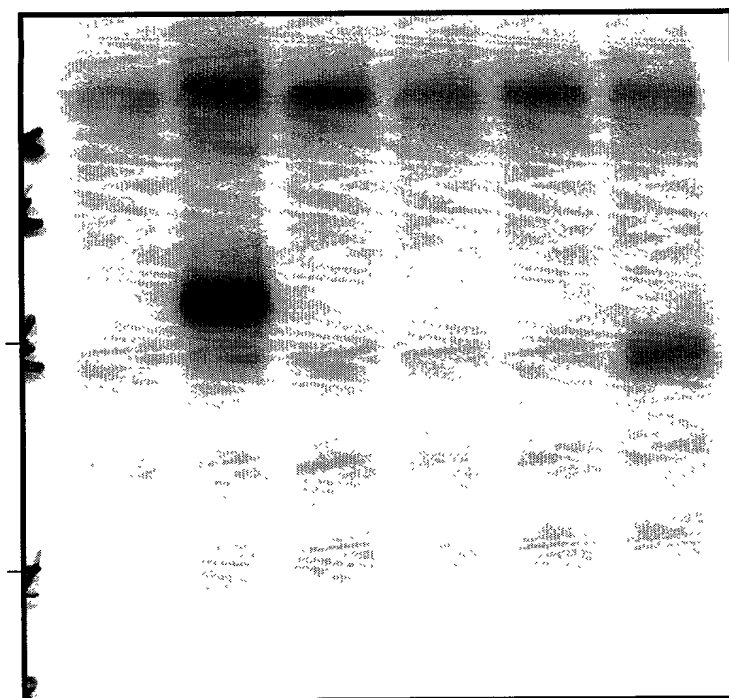


Deletion analysis

FIGURE 9

A

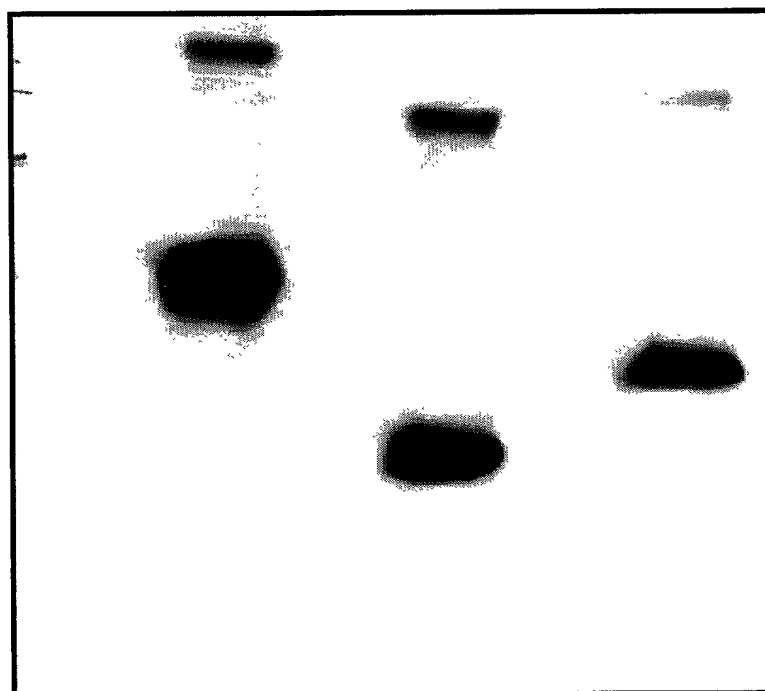
IP:	F-TRADE β		F-TRADE ¹⁻³²⁸		F-TRADE ¹⁻³⁶⁸	
	C	F	C	F	C	F



Kinase assay

B

IP:	F-TRADE β		F-TRADE ¹⁻³²⁸		F-TRADE ¹⁻³⁶⁸	
	C	F	C	F	C	F



anti-Flag blot

FIGURE 11

A

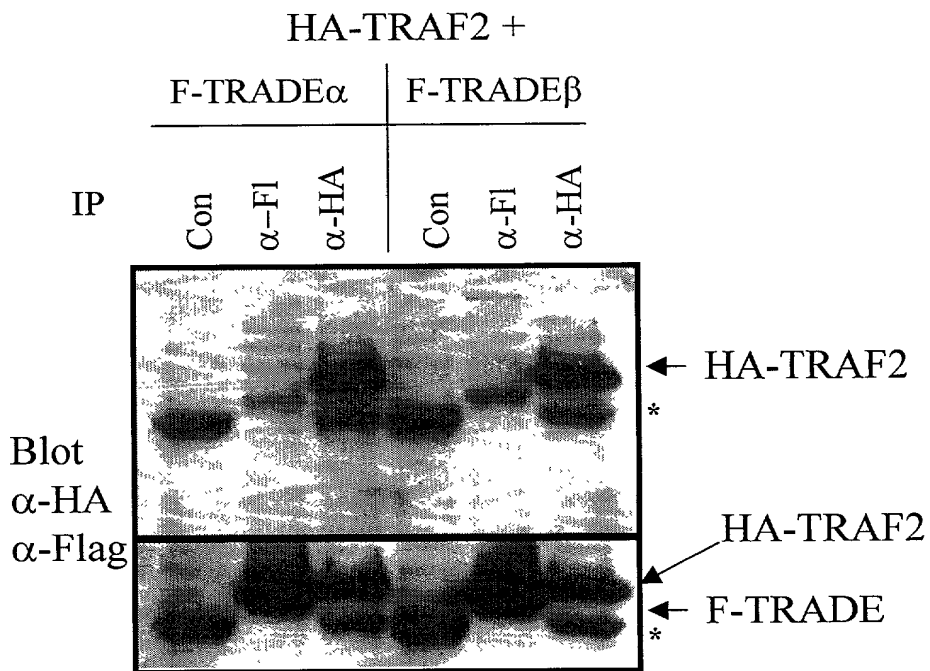
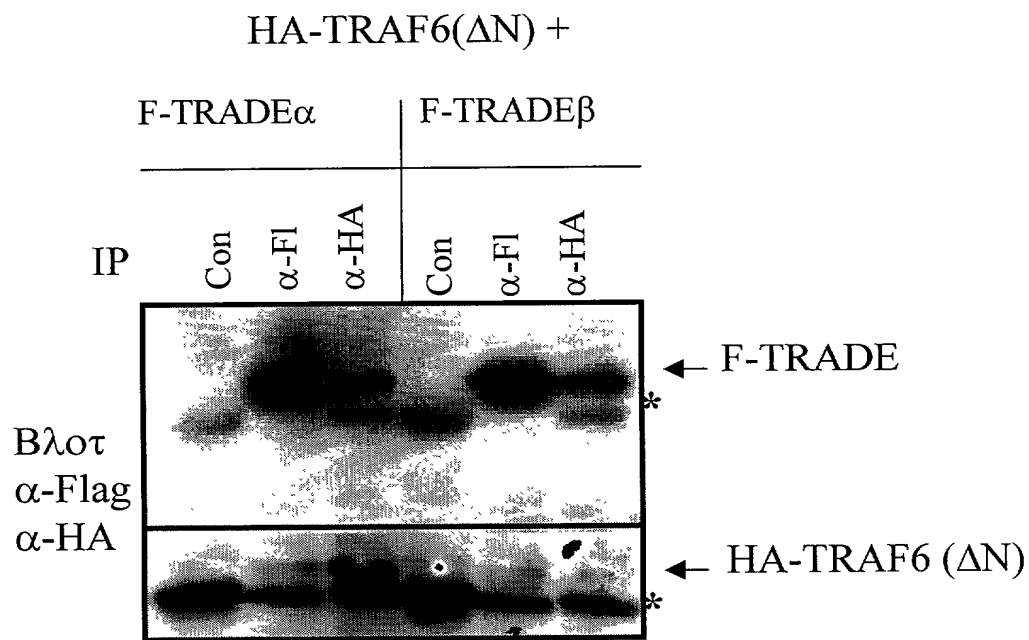


FIGURE 12

1052002300250

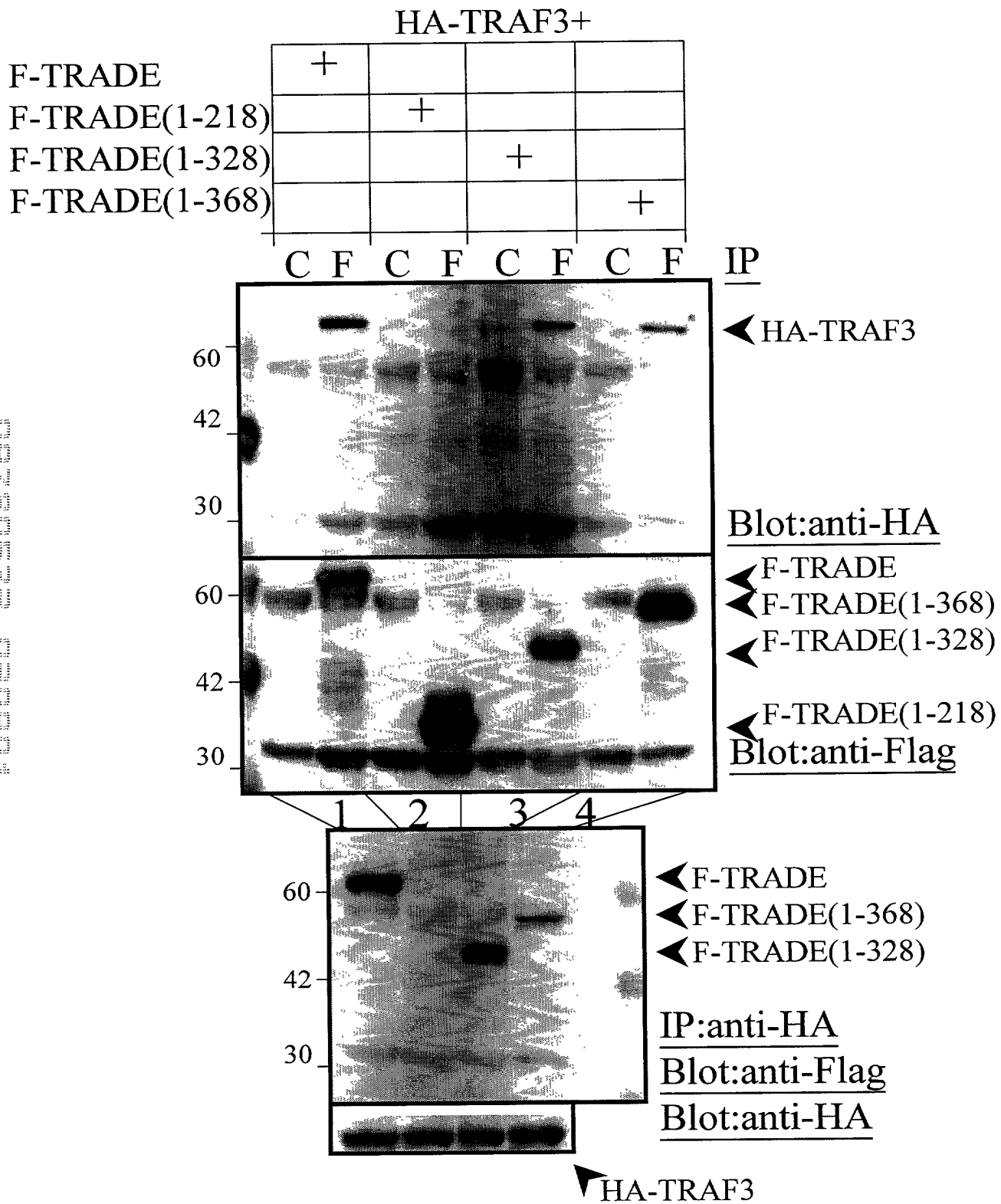


FIGURE 13

NFkB luciferase activity

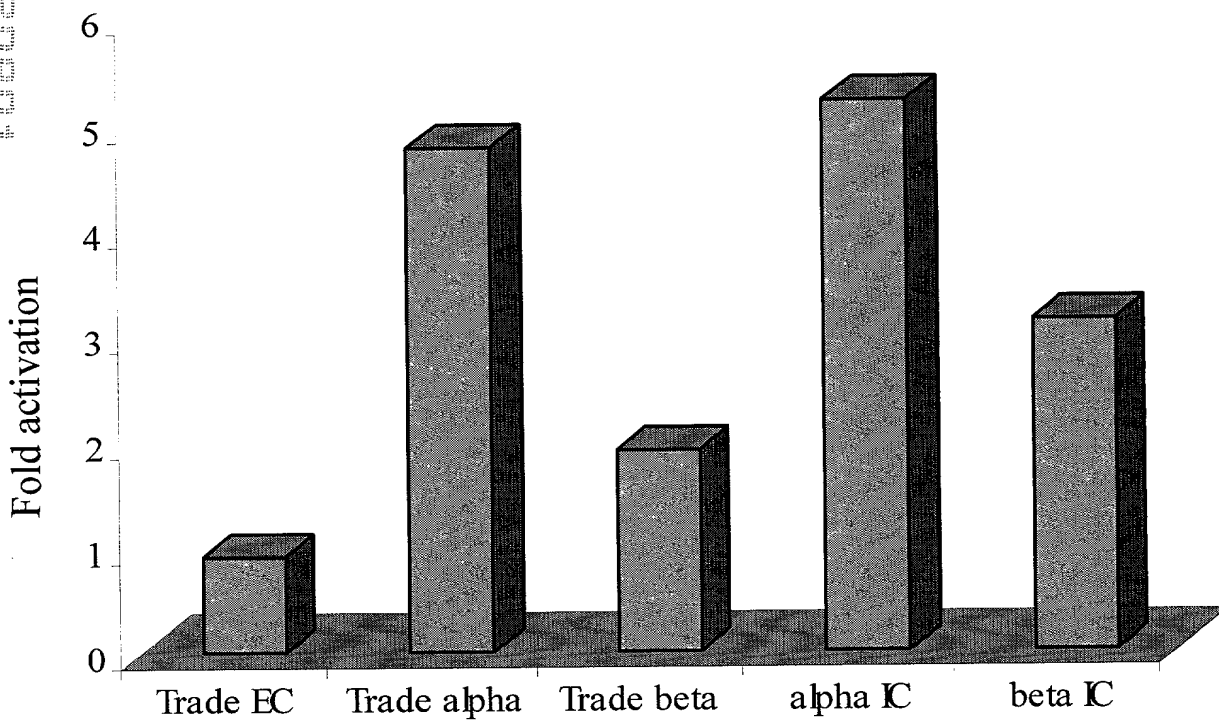
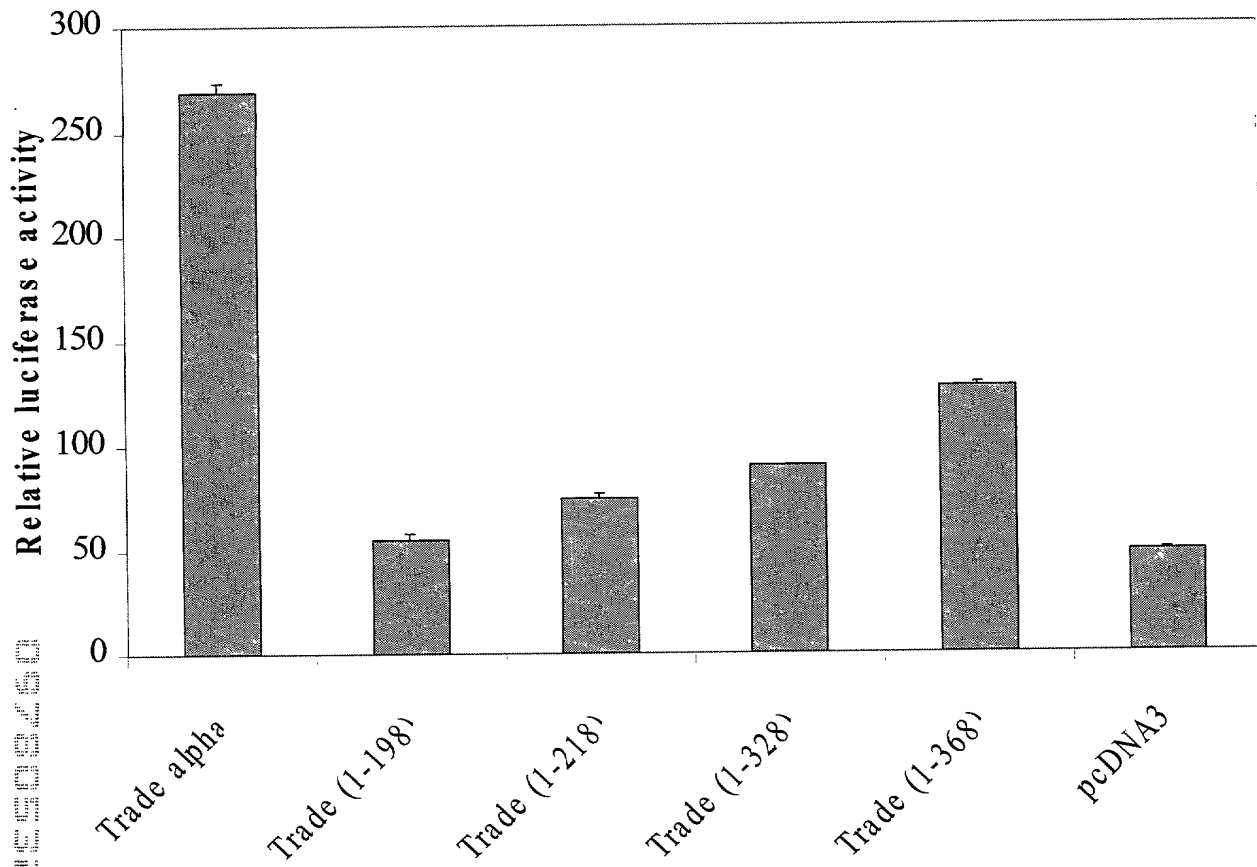


FIGURE 14